Amendments to the Specification:

Please replace the paragraph beginning at page 9, line 19 with the following amended paragraph:

In essence, a large parallel spreading sequence is used over multiple data bytes. The spreading sequences utilized can be, for example, M sequence, Barker, Gold, Kasami, or any type of PN-sequence. The parallel spreading in accordance with the invention can utilize differential encoding of the data stream in the transmit path to simplify data recovery in the receiver. If the parallel spreading scheme is applied to a M-ary modulation link then both in-phase (I) and quadrature ~~quadruture~~ (Q) channels can be spread using different PN-sequences to enhance channel security.

Please replace the paragraph beginning at page 15, line 3 with the following amended paragraph:

The output from the FEC process is applied to a bank of sixteen (16) correlators (not all shown), eight for each I and Q channel, which multiply the input by the corresponding Walsh code, accumulate, integrate, and dump over the byte period. A "select the largest" or "[[B]]biggest picker" circuit 1230 for the I channel and a "biggest picker" circuit 1235 for the Q channel analyze the correlation peaks from the respective eight correlators and output the corresponding data for the determined Walsh code to a sign correction and data serialization 1240. The Walsh decode information is routed back to FEC processor 1210 to confirm the Walsh decoder and FEC processes. Irregularities between processes will result in secondary reprocessing of the input sample. Failure of this process will result in generation of an error signal, which can be utilized with the link protocol to initialize a re-transmit algorithm. Once the Walsh codes are successfully decoded, the I and Q data is determined and combined into a single data stream.